

Kentucky Utilities Company has applied to the Kentucky Division for Air Quality for a Title V permit to operate an electric generating facility located at US 25 E., Four Mile, Kentucky. The plant is a Title V source because potential emissions of criteria pollutants exceed the major source threshold.

A preliminary determination was made to approve the permit and a public notice was placed in The Pineville Sun, on December 11, 1997. The comment period expired and comments were received from the source and the Utility Information Exchange of Kentucky (UIEK). Responses to these comments and the permit changes associated with these comments are listed in Attachment D. Additionally, minor revisions have been made to the language of Sections A, C, F, and G for clarity.

Comments were also received from the U.S. EPA on proposed/final permits issued to other utilities being permitted by this agency. Some of the additional comments were determined to be applicable to all electric generating, utility Title V permits being issued by the division. The changes resulting from these comments include the following:

- 1) Regulation 61:015 has not been approved by U.S. EPA. This regulation was replaced by a revision on April 1, 1984 and the current language must remain in the permit as issued. EPA requested that additional language be added stating that the regulation was state-enforceable only. The following italicized language has been added to Section B of the permit where 61:015 is applicable.

*“Regulation 401 KAR 61:015, Existing indirect heat exchangers (State Effective Date: April 1, 1984) applicable to an emission unit with a capacity of more than 250 mm BTU per hour and commenced before August 17, 1971. This regulation is state-enforceable only until such time as the effective date of an EPA rulemaking, approving this regulation into the federally-approved Kentucky State Implementation Plan*

- 2) The following language has been added to Section G, Subsection (d)2 Acid Rain Program Requirements as suggested.

The permittee shall comply with all requirements and conditions of the Title IV, Acid Rain Permit (A-98-003, ATTACHMENT C) and the Phase II permit application (including the Phase II NO<sub>x</sub> compliance plan and averaging plan, if applicable) issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

- 3) Section G, condition #21 states that “all previously issued construction and operating permits are hereby null and void.” This sentence should be changed to more accurately reflect Kentucky’s combined construction/operating permit program to read as follows:

“All previously issued construction and operating permits are hereby **subsumed** into this permit.”

In conclusion, a thorough analysis has been made of all relevant information available which pertains to this application. The division has concluded that the source will comply with all applicable air quality regulations and requirements. Compliance with the terms of the permit will ensure compliance with all air quality requirements. Therefore, it is recommended that the permit be issued as conditioned.

## **ATTACHMENT C:**

### **KENTUCKY DIVISION FOR AIR QUALITY'S (DIVISION) RESPONSE TO PUBLIC COMMENTS RECEIVED FROM KENTUCKY UTILITIES COMPANY (KU) ON PINEVILLE GENERATING STATION DRAFT TITLE V PERMIT**

1. Comment (1): In numerous places in the permit, the address is incorrectly given as Pineville, Kentucky as provided in the permit application. It should be "Four Mile, Kentucky 40939."

Response to (1): The Division has made the correction where Pineville, Kentucky is referenced.

2. Comment (2): Reference: Emissions Summary. KU could not reproduce the values for pollutant actual or potential emissions in tons per year and requests that we discuss the values with the Cabinet.

Response to (2): Since the emissions summary is not part of the permit but is an estimation, and is for informational purposes only, the Division believes no revision is necessary at this time. For regulated criteria pollutants with emission standards, potential emissions are equated with the allowable emissions.

3. Comment (3): Reference: Permit Statement of Basis, Page 1, Source Description. The dates provided are the dates the emissions units became operational, rather than the dates that construction was commenced. This could be addressed as follows:

E. Unit 01- boiler constructed before 1951 (operational in 1951).

E. Unit 02 - coal handling constructed before 1951 (operational in 1951).

E. Unit 03 - auxiliary boiler constructed before 1964 (operational in 1964).

3. Response to (3): The Division has made the descriptive clarifications on the Statement of Basis as well as the permit
4. Comment (4): Permit Statement of Basis, Page 2, "Comments".

The fourth bullet refers to the use of the continuous opacity monitors (COMS) as indicators of particulate emissions for emission unit 01. Please refer to the General Comment Section for discussion of this issue.

The eighth bullet should read "...this emission unit.." rather than the plural form.

Response to (4): Regarding the use of continuous opacity monitors as indicators of compliance for particulate emissions, please refer to the General Comment Section response. For the eighth bullet of the "Comments:" section of the Statement of Basis, the Division has revised this bulleted statement to read: The permittee shall submit a compliance assurance monitoring (CAM) plan with an application for significant revision of applicable emission units or with the application for Title V renewal.

## Comments on Emission Unit 01

5. Comment (5): Reference: Page 2, Description. The emission unit commenced construction prior to 1951, which is the date it became operational.

Response to (5): The Division has made the descriptive change on the permit.

6. Comment (6): Reference: Page 2, Emission Limitations. Delete the language in item (a) which references assuring continuous compliance with the particulate standard using opacity. Please refer to the General Comments Section for discussion of this issue.

Response to (6): The Division does not agree to delete language in (a) referring to assuring continuous compliance with the particulate emission standard using opacity because this satisfies the periodic monitoring requirement pursuant to, including but not limited to Regulation 401 KAR 50:035, especially Section 7(1)(c); KU did not give an acceptable proposed plan that would satisfy the periodic monitoring requirements to assure compliance with the particulate emission standard; therefore, the permitting authority, the Division, must impose necessary periodic monitoring requirements pursuant to, including but not limited to, Regulation 401 KAR 50:035, especially Section 7(1)(c), as well as Section 504 of the Clean Air Act, and 40 CFR Part 70. The Division will refer to the General Comment Section for discussion of this issue and respond to this issue in detail with regard to that section.

7. Comment (7): Reference Page 3, Testing Requirements. Delete items (a) and (b). Please refer to the General Comments Section for discussion of this issue.

Response to (7): Refer to General Comments Section responses for further discussion of this issue. The Division does not agree to delete the testing requirements. KU did not give an acceptable proposed plan that would satisfy the periodic monitoring requirements to assure compliance with the particulate emission standard; therefore, the permitting authority, the Division, must impose necessary periodic monitoring requirements pursuant to, including but not limited to, Regulation 401 KAR 50:035, especially Section 7(1)(c), as well as Section 504 of the Clean Air Act and 40 CFR Part 70. The requirements are dependent upon information obtained through stack testing which the Division may require at any time pursuant to Regulation 401 KAR 50:045, Performance tests, Section 1.

8. Comment (8): Reference: Page 3, Specific Monitoring Requirements. Item (3), 3rd line. Delete the words “for the COMs,” since 401 KAR 61:005. Section 3(5) provides this exemption for all monitoring systems.

Response to (8): The Division agrees to delete “for the COMS” as requested, in accordance with Regulation 401 KAR 61:005, Section 3(5).

9. Comment (9): Reference: Page 4. Specific Recordkeeping Requirements. Delete item (b). Please refer to the General Comments Section for discussion of this issue.

Response to (9): The Division will respond in detail to this issue in the responses to the General Comments Section. The Division does not agree to delete item (b). This requirement fulfills, along with General Conditions, the recordkeeping requirement of required periodic monitoring for particulate emissions, pursuant to Regulation 401 KAR 50:035, Section 7(1)(d).

10. Comment (10): Reference: Page 5, Specific Reporting Requirements. Delete item (b). Please refer to the General Comments Section for discussion of this issue.

10. Response to (10): The Division will respond in detail to this issue in the responses to the General Comments Section. The Division does not agree to delete item (b). This requirement fulfills, along with General Conditions, the reporting requirement of required periodic monitoring for particulate emissions, pursuant to Regulation 401 KAR 50:035, Section 7(1)(e).

11. Comment (11): Reference: Page 5, Specific Control Equipment. Item (a). Correct misspelling of “manufacturer’s”.

11. Response to (11): The Division has made the correction.

#### Comments on Emission Unit 02

12. Comment (12): Reference: Page 6, Description. The emission unit commenced construction prior to 1951, which is the date it became operational.

12. Response to (12): The Division has made the descriptive change on the permit.

#### Comments on Emission Unit 03

13. Comment (13): Reference: Page 8, Description. The emission unit commenced construction prior to 1964, which is the date it became operational.

13. Response to (13): The Division has made the descriptive change on the permit.

14. Comment (14): Reference: Page 8, Specific Monitoring Requirements. Item (b) requires a qualitative visual observation on a weekly basis and maintenance of a log of the observations. Since this boiler is used very infrequently, KU requests that this language be changed to read: “The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis, when the unit is operating, and maintain a log of the observations.” This will greatly decrease unnecessary recordkeeping of noting that the emissions unit is not operating.

14. Response to (14): The Division has made the suggested change to “...when the unit is operating, and...”.

### On Insignificant Activities

15. Comment (15): Reference: Page 10. Item (1): Delete the phrase “from plant maintenance” from used oil burning.

Add items (7) Paved and unpaved roads and (8) Cooling tower.

15. Response to (15): The Division has deleted the phrase but note the reword of this item to be consistent with other KU Title V permits: “1. Burning de minimus quantities of used oil for energy recovery.”

The Division has added “Paved and unpaved roads to which 401 KAR 63:010 applies”, and “Cooling tower to which 401 KAR 63:010 applies”.

16. Comment (16): KU requests that the following language be added as an additional item under insignificant activities to read: “All other activities individually resulting in emissions less than 10 lb/day or 2 ton/year of a regulated air pollutant not specifically listed above.” The rationale is to eliminate the need for a permit revision, even if only an administrative amendment, if additional insignificant sources are brought on site.

16. Response to (16): The Division acknowledges that addition of this term could reduce some notifications and permit changes; however, the criteria threshold for which a hazardous air pollutant must not exceed to meet the insignificant activity criteria based on 401 KAR 50:035, Section 5(4)(d) is 0.5 ton per year. Kentucky Utilities Company’s proposal of 10 pounds per day and two tons per year exceed the cutoff for a hazardous air pollutant emission. Additionally, the condition does not ensure that best available control technology requirements per 401 KAR 63:022 will be met for a new activity, or that applicable requirements, standards, and regulations will be followed. Therefore, this generalization of activities does not comply with 401 KAR 50:035, Section 5. Thus, the Division does not concur with addition of this term.

Comments on Section F, Monitoring, Record Keeping, etc.

17. Comment (17): Reference: Page 14, item 6. A requirement to contact the Regional Office promptly if a deviation from a permit requirement occurs is reasonable; however, defining this as within three hours of the occurrence may not be practical or possible in some cases (e.g.; the occurrence may not be discovered within this time period and Division for Air Quality personnel may not be available). We request that the language be changed to define promptly as: “within 3 normal working hours of discovery of the deviation, where normal working hours are defined as between 8:00 am and 4:30 pm Monday through Friday, excluding holidays.”

17. Response to (17): The Division has revised the cited condition which now reads:

6. a) In accordance with the provisions of Regulation 401 KAR 50:055, Section 1, the owner or operator shall notify the Division for Air Quality’s London Regional Office concerning startups, shutdowns, or malfunctions as follows:

- i) When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
- ii) When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.

b) In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions to the Division for Air Quality's London Regional Office. Prompt reporting shall be defined as quarterly for any deviation related to emission standards (other than emission exceedances covered by condition 6(a) above) and semi-annually for all other deviations from the permit requirements if not otherwise specified in the permit.

#### GENERAL COMMENTS (FROM KU) - PINEVILLE GENERATING STATION

18. General Comment (1): Issue of assuring compliance with the particulate emission standard by using opacity data as a indicator:

Under 401 KAR 50:035, Section 7(1)(c), the Cabinet has the authority to require only those emission monitoring and analysis procedures or test methods required in the applicable regulations for the emissions unit. While 401 KAR 61:005, Section 3(6)(a) specifically requires indirect heat exchangers to continuously monitor opacity and sulfur dioxide, it does not require this for particulate emissions. In addition, there is no requirement in 401 KAR 61:015. (Indirect Heat Exchangers) for the continuous emission monitoring of particulates.

The existing regulations do provide for periodic monitoring of particulate emissions, using applicable EPA Reference Method stack tests, as the method by which to demonstrate compliance. To require continuous monitoring of either particulates or a surrogate for particulates (such as opacity or ESP control parameters), establishes a new requirement. Using a Title V permit to impose new requirements on an existing source is contrary to USEPA's White Paper, dated July 10, 1995. For new requirements to be imposed on any source category or emissions units, both USEPA and the Cabinet must conduct proper rulemaking process, with the opportunity for public notice and comment.

The establishment of continuous monitoring methods for applicable emission units is premature especially in light of the future requirements under the Compliance Assurance Monitoring (CAM) rule. As stated on page 3 of the Permit Statement of Basis, this rule does not apply until such time as the permittee applies for a significant revision to this Title V permit or upon Title V permit renewal. Under the CAM rule, it is the permittee's obligation to develop a Compliance Assurance Monitoring Plan for applicable emissions units and to submit it to the permitting authority for review

and approval. KU is aware of this obligation and will develop and submit a CAM Plan at the appropriate time for applicable emission units at the Pineville Generating Station. KU has an understanding of how optical density relates to opacity (the principle by which we currently measure opacity), but KU asserts that what is needed is to determine how optical density relates to mass particulate emissions.

KU is not aware of a readily quantifiable/direct relationship between opacity and mass particulate emissions. Because of this, we feel that more information and testing needs to be gathered to make an informed decision on whether opacity indicator ranges are even appropriate for our emissions units. It may be that some other method, or combination of methods, such as indicator ranges on the operating parameters for our control devices, are more appropriate methods for indicating continuous compliance with particulate emissions. The permittee should have the flexibility to choose the method by which it will assure compliance with the particulate emissions standard on an emissions unit by emissions unit basis.

Thus, in lieu of the Cabinet's language on assuring continuous compliance with the particulate emission standards, KU proposes to:

- (a) (1) Within the first 12 months, conduct a performance test for particulate emissions to demonstrate compliance with the allowable standard.

NOTE: This amount of time will be needed to engage the services of a qualified stack testing firm or modify our in-house capabilities to conduct performance tests for particulates and the conduct stack tests on all of the applicable emission units in our system.

- (2) Conduct an additional performance test for particulate emissions during the third year of the permit term.

- (3) Maintain records on control parameters (i.e., current and voltage readings) for the electrostatic precipitators during the permit term.

- (b) Within the following 48 months, establish a continuous monitoring method using either Opacity Indicator Ranges (from COMS), Parametric Monitoring Indicator Ranges (from control device operations), or other method or combination thereof to be used as an indicator of particulate emissions from applicable emissions units.

NOTE: This amount of time will be needed to work with the Cabinet to resolve issues regarding: minimum data requirements, relationships between the indicator ranges and particulate emissions, averaging times, establishment of opacity indicators for particulate emissions greater than the opacity limitations themselves, opacity limitation variance procedures during stack testing, recordkeeping and reporting requirements, etc.



## 18. Response to General Comment (1):

The basis and authority of this requirement is clear. Section 504 of the Clean Air Act states that each Title V permit must include “conditions as necessary to assure compliance with applicable requirements of [the Act], including the requirements of the applicable implementation plan” and “inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions.” 42 U.S.C. §7661c(a),(c). If the underlying applicable requirement imposes no such obligation, the permit must require under 40 CFR 70.6(a)(3)(i)(B), periodic testing or instrumental or non instrumental monitoring which yields reliable data from the relevant time period that are taken under conditions representative of the source’s operations and, therefore, representative of the source’s compliance with its permit. The State Regulation 401 KAR 50:035 has been promulgated under Kentucky Revised Statutes 224.10-100 and the Regulation 401 KAR 50:035, Section 7(1)(c) mentions that “if the applicable requirement does not require periodic testing or monitoring, the permit shall contain periodic monitoring sufficient to yield reliable data from the relevant time period representative of the source’s compliance with the permit pursuant to the reporting requirements of paragraph (e) of this subsection.” Therefore, the Clean Air Act, KRS 224.10-100, 40 CFR 70.6 and Regulation 401 KAR 50:035 establish the statutory and regulatory authority for the state.

The specific Regulations 401 KAR 61:015 and 401 KAR 61:005, applicable to this emissions unit do not establish a set schedule for periodic testing or monitoring for compliance demonstration for the particulate standard; therefore, the Division has developed the periodic monitoring requirement for particulate emissions as disclosed in the draft permit pursuant to Regulation 401 KAR 50:035, Permits. This requirement is merely a periodic monitoring requirement as required by the existing regulations. Therefore, because in the Pineville Station Title V application and public comments, KU did not include an acceptable proposal on how to demonstrate continuing compliance with the particulate emission standard, or in other words KU did not include an acceptable periodic monitoring plan for particulate emissions, the Division must impose periodic monitoring for particulate emissions sufficient to assure continuing compliance with the allowable particulate emission standard.

The Regulations, 401 KAR 61:005 and 401 KAR 61:015, do not establish periodic monitoring provisions for particulates. Although Regulation 401 KAR 61:005 indicates performance testing may be conducted for the indirect heat exchanger, particularly initially, this provides only a snapshot of compliance with the particulate emission standard and does not provide the means upon which to certify continuous compliance. Just one or two stack tests in five years do not assure continuing compliance with the particulate emission standard. Even five stack tests in five years do not provide the substantial evidence required to certify continuing compliance annually. The periodic monitoring proposed with use of opacity indicator ranges developed during the stack testing for particulate emissions is periodic monitoring as required by, including but not limited to, 40 CFR Part 70, Section 504 of the Clean Air Act, and Regulation 401 KAR 50:035, Permits. (Federal statutory authority: 42 U.S.C. §7661c. State statutory authority: KRS 224.10-100)

18. Response to General Comment (1) continued:

The Division is not making any new rule through the Title V permitting procedure. The said procedure is just a periodic monitoring requirement for compliance demonstration with particulate matter as required under current state and federal regulations. The State Regulation 401 KAR 50:035, Section 7(1)(c) mentions that “if the applicable requirement does not require periodic testing or monitoring, the permit shall contain periodic monitoring sufficient to yield reliable data from the relevant time period representative of the source’s compliance with the permit pursuant to the reporting requirements of paragraph (e) of this subsection.” Since the applicable regulation to this emissions unit does not establish a set schedule for periodic testing or monitoring for compliance demonstration with particulates standard, the Division has developed the periodic monitoring requirement for particulate emissions as disclosed in the draft permit pursuant to Regulation 401 KAR 50:035, Permits. This requirement is merely a periodic monitoring requirement as required by the existing regulations; not a new standard. The Division is not making a new standard for particulate matter through Title V permitting; rather implementing what is required by law. Thus, the question of following proper procedure of making new rules is irrelevant here.

The Division agrees with the comment that the source is not subject to Compliance Assurance Monitoring (CAM) procedures since the application for the facility was deemed administratively complete by the Division prior to promulgation of CAM procedures and the permittee is not required to implement the CAM procedures until the permit undergoes revision or renewal. However, the Division finds this comment on CAM applicability for this source irrelevant since the permit does not include any requirements developed based on CAM rule. The Division is not implementing CAM but is implementing periodic monitoring required by existing regulations.

Therefore, the Division has the authority to require the periodic monitoring for particulate emissions described in the Pineville Station Title V permit and the Division does not agree with General Comment (1).

As KU asserts that the determination of the relationship between opacity and particulate emissions is what is needed, this is what is currently required by the permit. KU is to establish the relationship between opacity readings and the particulate emission rates at the appropriate emissions units and develop an opacity indicator range through stack testing which assures compliance with the particulate emission standard. The Division realizes a direct relationship between opacity and particulate emissions for utility boilers is not generally established; however, there is no doubt among the scientific and regulatory communities that opacity can be used as an indicator for particulate emissions. The Division has proposed in the permit to use the opacity of emissions as an indicator for emissions of particulate matter. The periodic monitoring requirement for particulates which uses opacity data is formatted in a way that even excursions from the indicator range do not constitute a violation automatically. All it does is indicate a possibility of an exceedence of particulate emission standard and requires the permittee to demonstrate compliance with the particulate standard through performance testing.

18. Response to General Comment (1) continued:

KU asserts that KU should have the flexibility to choose the method by which it will assure compliance with the particulate emissions standard and that some other method may be more appropriate for indicating continuous compliance with particulate emissions. The Division has not received an acceptable periodic monitoring proposal for particulates. Therefore, see responses above.

Response to General Comment (1) continued, and especially (a)(1)(2)(3), and (b) and “NOTE”: Conducting within the first 12 months one performance test for particulate emissions to demonstrate compliance with the allowable standard and maintaining records on control parameters such as current and voltage for the electrostatic precipitators does not allow for establishing parameter ranges proven to demonstrate compliance during the performance test, with which to compare the parameters on a periodic basis and assure compliance. The same reasoning applies to just conducting an additional performance test for particulate emissions during the third year of the permit term and maintaining records on control parameters such as current and voltage for the electrostatic precipitators. The stack testing must be used to establish the range(s) for parameter(s) to periodically monitor to assure compliance because these range(s) were demonstrated as being at levels in which the particulate emissions standard is met. The Division believes the performance testing for particulate emissions for the appropriate emissions units must be conducted within the six months following the issuance date of the permit and the Division is requiring this testing pursuant to Regulation 401 KAR 50:045.

The permittee’s alternate proposal of periodic monitoring for particulates is not acceptable since merely monitoring of the operating parameters of electrostatic precipitators does not assure compliance with the particulate standard unless the permittee is willing to operate the control equipment in such a way that each operating parameter stays in a range developed from data collected during performance tests for particulates. The Division thoroughly investigated the possibility of monitoring operating parameters of electrostatic precipitators and correlating that with the operating conditions during performance testing for particulates and discussed this issue several times with the representatives of the power plants and discarded this option in response to their request. However, the Division is willing to accept an alternate proposal of periodic monitoring for particulates as long as that proposal serves the purpose. The Division finds KU’s alternate current proposal is unacceptable since that would not serve the purpose of periodic monitoring for particulates.

The Division understands the associated problems of developing the indicator range of opacity to be used for periodic monitoring for particulates. The Division is willing to work with the permittee to resolve all the hurdles in developing this indicator range. The Division is confident that the problems associated with the development of the indicator range can be solved within the time frame prescribed by the permit.

18. Response to General Comment (1) continued:

Response to General Comment (1) continued, and especially (a)(1)(2)(3), and (b) and “NOTE”:

With regard to KU’s statement about establishment of opacity indicators for particulate emissions greater than opacity limitations themselves, this is not considered acceptable. The upper limit of the opacity will be developed from data collected during the performance test for particulates and will be done in a case by case basis for each emissions unit. The upper limit of the opacity will be used as an indicator for periodic monitoring for particulates; and establishing an upper limit of opacity will not change the opacity standard for that unit. The Division understands that an emissions unit may exceed the opacity standard without exceeding the particulate mass standard. However, the Division’s current position on this issue is not to allow establishing an upper limit of opacity averaged over a three hour period more than the opacity standard.

19. General Comment (2): KU requests that the following language be added as an additional item under General Conditions: “In accordance with Region IV’s Continuous Emission Monitoring (CEM) Enforcement Plan (CEP), the permittee shall be deemed in compliance if less than two percent of the non-exempt opacity or emission values during any calendar quarter are in excess of the permit limit.”

19. Response to General Comment (2): As the Division understands, the U.S. EPA’s current intention is to use the CEP as a screening mechanism to reduce work load and to flag the sources with potential violations. The policy will reduce the workload for the State since it only requires a detailed evaluation of downtime of CEM if the downtime exceeds two percent of the total operating time. However, the Division evaluates all the downtime, thus, obviously the CEP is not required to be incorporated in the Title V permit as a screening mechanism of CEM downtime.

Now, the U.S. EPA is not promoting its intention of using CEP for screening opacity exceedances in determining enforcement action as suggested by the permittee. If the policy is incorporated in the Title V permit, an enforcement policy will become federally enforceable for determining enforcement action and will contradict the state and federal regulations on the opacity standard since the CEP will allow the permittee to violate the opacity standard up to a certain percent of operating time and shield the permittee from enforcement action. Thus, the Division finds no reason to incorporate the CEP into the permit at this time.

## **ATTACHMENT C:**

### **ADDITIONAL CHANGES TO KENTUCKY UTILITIES COMPANY (KU) PINEVILLE GENERATING STATION DRAFT TITLE V PERMIT**

1. The FINDS number on the front page has been deleted.
2. The page numbers have been renumbered starting with the front cover page as page one, thus the Table of Contents page numbers for different sections has changed.
3. The correct completeness date has been identified in Section A, paragraph one, as February 13, 1997. Also, paragraph one has been reworded to read:

“Pursuant to a duly submitted application which was determined to be complete on February 13, 1997, the Kentucky Division for Air Quality hereby authorizes the operation of the processing and air pollution control equipment described herein in accordance with the terms and conditions of this permit. This final permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.”
4. Except with regard to the Acid Rain program and units, affected facilities have been changed to read “emissions units” throughout.
5. Paragraphs two and three of Section A have been rephrased as shown: The permittee shall not construct, reconstruct, or modify any emissions units without first having submitted a complete application to the permitting authority and received a permit for the planned activity from the permitting authority, except as provided in this permit or in Regulation 401 KAR 50:035, Permits. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Division or any other federal, state, or local agency.
6. Consistency in punctuation has been made throughout the permit.
7. Above the Description for each emissions unit the identification of the unit has been made including the company’s application emission point/unit number in parentheses as shown as an example for point 01: “Emissions Unit 01 (point 01, unit 03) Indirect heat exchanger”.
8. For emissions unit 01, Applicable Regulations section has been slightly reworded as shown: Regulation 401 KAR 61:015, Existing indirect heat exchangers applicable for an emission unit greater than 250 MMBTU/hr and commenced before August 17, 1971, and Regulation No. 7, Prevention and Control of Emissions of Particulate Matter from Combustion of Fuel in Indirect Heat Exchangers.

9. Under emissions unit 01, 2 a), the third and fourth line now includes: . . .from continuous opacity monitoring (COM) data. . .

10. For emissions unit 01, 2 b) has been revised to include the spelled out numbers forty and sixty, and appears as shown: b) Pursuant to Regulation 401 KAR 61:015, Section 4(4), and Regulation No. 7, emissions shall not exceed forty (40) percent opacity based on a six-minute average except that a maximum of sixty (60) percent opacity is allowed for a period or aggregate of periods not more than six minutes in any sixty minutes during building a new fire, cleaning the firebox, or blowing soot.

11. For emissions unit 01, 2 c) now reads: c) Pursuant to 40 CFR 52, Subpart S, sulfur dioxide emissions shall not exceed 1.8 lbs/MMBTU based on a twenty-four-hour average.

12. For emissions unit 01, a typo has been corrected under 3 b): shall conduct on performance test now reads shall conduct one performance test. . .

13. For emissions unit 01, 4 a) has been reworded as shown: a) Pursuant to Regulation 401 KAR 61:015, Section 6 (6), monitoring of operations for sulfur dioxide emissions shall be conducted daily by the use of a continuous emission monitoring system (CEMS) or by representative fuel sampling and analysis of fuel to be burned if the CEMS is down. Records of the data from the CEMS or the fuel sampling, analysis, and sulfur and heat content shall be maintained for inspection upon request by any duly authorized representative of the Division for Air Quality. The CEMS utilized for measuring sulfur dioxide emissions shall comply with Regulation 401 KAR 61:005, Section 3, particularly Performance Specification 2 or 40 CFR 75, Appendix A, and the summary shall consist of hourly averages.

14. For emissions unit 01, 4 d) has been reworded as shown: d) Pursuant to Regulation 401 KAR 61:005, Section 3, a continuous opacity monitoring system (COMS) for measuring opacity of visible emissions shall conform to the requirements of this section which include installing, calibrating, operating, and maintaining the COMS for accurate opacity measurement, and demonstrating compliance with Performance Specification 1 of 40 CFR Part 60, Appendix B, as requested by the Division.

15. For emissions unit 01, 4 e), the part formerly saying . . .provided that the source or operator shows to the Division's satisfaction. . . is now worded “. . .provided that the source owner or operator shows to the Division's satisfaction. . .”.

16. For emissions unit 01, 5 a) now reads: a) Records shall be kept in accordance with Regulations 401 KAR 61:005, Section 3(16)(f) and 401 KAR 61:015, Section 6, with the exception that the records shall be maintained for a period of five (5) years.

17. For emissions unit 01, 5 c) now reads: c) Records, including those documenting the results of each compliance test, shall be maintained for five (5) years pursuant to Regulation 401 KAR 50:035.

18. For emissions unit 01, a portion of 6 a) 1. has been reworded from “a written report of excess emissions and the nature of the cause of. . .” to “a written report of excess emissions and the nature and cause of . . .”.

19. For emissions unit 01, under Subsection 7 a), the spelling of manufacture’s has been corrected to “manufacturer’s”.

20. For emissions unit 02, the punctuation under Applicable Requirements for a)(2) has been corrected changing “...during handling;” to “...during handling.”

21. For emissions unit 03, Applicable Regulations now reads: “Applicable Regulations:

Regulation 401 KAR 61:015, Existing indirect heat exchangers applicable for an emission unit less than 250 MMBTU/hr and commenced before April 9, 1972, and  
Regulation 7, Prevention and Control of Emissions of Particulate Matter from Combustion of Fuel in Indirect Heat Exchangers”.

22. For emissions unit 03, 2. Emission Limitations now reads: “ 2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 61:015, Section 4(4), and Regulation No. 7, particulate emissions shall not exceed 0.8 lb/MMBTU based on a three-hour average. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using fuel usage rates, fuel analysis, and appropriate emission factor information.  
Formula (AP-42 factor) for particulate emissions: 0.002 lb/Gallon / Heating value in MMBTU/gallon.
- b) Pursuant to Regulation 401 KAR 61:015, Section 4(4), and Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average.
- c) Pursuant to Regulation 401 KAR 61:015, Section 5 (1), the sulfur dioxide emissions shall not exceed 4.0 lb/MMBTU based on a twenty-four-hour average. Compliance with the sulfur dioxide allowable standard may be demonstrated by calculating sulfur dioxide emissions using fuel usage rates, fuel analysis, and appropriate emission factor information.  
Formula(AP-42 factor) for sulfur dioxide emissions: 0.142 x %Sulfur lb/Gallon / Heating value in MMBTU/gallon.”

23. For emissions unit 03, 4 a) now reads at the beginning: “In accordance with Regulation 401 KAR 61:015, Section 6, the sulfur content and heating value...”.

24. Section C, first paragraph has been rephrased, and has paved and unpaved roads and cooling tower added, with #1, #2, and #6, rephrased, as shown here:

## SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant, the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

1. Burning deminimus quantities of used oil for energy recovery.
2. Infrequent boiler cleaning solution evaporation.
3. Lubricating oil tanks.
4. Unleaded gasoline storage tanks ( < 10,000 gallons constructed prior to 1974).
5. No. 2 fuel oil storage tanks ( <415,000 gallons constructed prior to 1974).
6. Wet ash ( bottom and flyash) handling system to which Regulation 401 KAR 63:010 applies.
7. Paved and unpaved roads to which Regulation 401 KAR 63:010 applies.
8. Cooling tower to which Regulation 401 KAR 63:010 applies.

25. Section F, Condition 1, a) punctuation has been corrected: “1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a) Date, place as defined in this permit, and time of sampling or measurements;”.

26. Section F, Condition 7 has been rephrased, as shown here:

“7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality’s London Regional Office and the U.S. EPA in accordance with the following requirements:

- a) Identification of each term or condition of the permit that is the basis of the certification;
- b) The compliance status regarding each term or condition of the permit;
- c) Whether compliance was continuous or intermittent;
- d) The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1) (c), (d), and (e); and



- e) The certification shall be postmarked by the thirtieth (30th) day following the applicable permit issuance anniversary date.”

27. For Section F, Condition 9, has been revised so the condition reads as shown here: “9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of the performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five (45) days after the completion of the field work.”

28. Under Section G, Condition (a) 3, the following has been added as required: “ii) If any additional applicable requirements of the Acid Rain Program become applicable to the source;” and the former ii) is now iii), and the former iii) is now iv).

29. For Section G, Condition (a) 9, 90 has been spelled out as well, as ninety (90).

30. Section G, Condition (a) 12, has been reworded regarding “Kentucky Cabinet for Natural Resources...” as shown here: “12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection, or any other federal, state, or local agency.”

31. Section G, Condition (a) 15, has been reworded as shown here: “15. Permit shield: Except as provided in Regulation 401 KAR 50:035, compliance by the emissions units listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of the issuance of this permit.”

32. For Section G, Condition (a) 16, the 30 has been spelled out as well, as “. . .thirty (30). . .”.

33. For Section G, Condition (a) 20, the first part of the first line reads: Pursuant to Section VII 2.(1) of the policy manual...; and on the last sentence, “Regulation” has been added in front of 401 KAR 50:045.

34. Section G, (b) has been reworded as shown here: “(b) Permit Expiration and Reapplication Requirements”

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division.

35. Section G, Condition (d)1.(iv) has been revised as shown here: “iv) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of Regulation 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.”

36. Section G, Condition (g)1. has been revised as shown here: “1.The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:”

37. For emissions unit 02, in Subsection 7 “operated” and “operation” have been changed to “used” and “use”.

38. Section E title has been rephrased as shown here: Section E - Source Control Equipment Operating Requirements.

39. Section F, Condition 5 has been revised as shown here:

5. Reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Division's London Regional Office no later than the six-month anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 401 KAR 61:005, General provisions. All reports shall be certified by a responsible official pursuant to Section 6 (1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.

40. Section F, Condition 8 has been revised as shown here:

8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission report is mailed to the permittee.

41. Section G(a), Condition 5 has been added which reads:

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority.”

42. Section G(a) conditions have been renumbered.

43. Section G(a), Condition 21 has been added which reads:

21. All previously issued construction and operating permits are hereby null and void.